

Notice of Allowability**Application No.**

09/982,782

Examiner

Brian P. Egan

Applicant(s)

ISHIKAWA ET AL.

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 1/22/04.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

NOTICE OF ALLOWANCE

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Harris Pitlick on April ¹²~~4~~, 2004.

The application has been amended as follows:

IN THE CLAIMS:

CLAIM 1:

Line 1, insert the word -- metal -- after the phrase "comprising a peelable".

Line 3, delete the phrase "at least one of" after "wherein".

Line 3, delete the phrase "and said top layer" after "said substrate".

CLAIM 12:

Line 1, delete the word "Withdrawn" after the symbol "(" and before the symbol ")".

Line 1, insert the word -- Original -- after the symbol "(" and before the symbol ")".

CLAIM 13:

Line 1, delete the word "Withdrawn" after the symbol "(" and before the symbol ")".

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Line 1, insert the word -- Original -- after the symbol “(“ and before the symbol “)”.

CLAIM 14:

Line 1, delete the word “Withdrawn” after the symbol “(“ and before the symbol “)”.

Line 1, insert the word -- Original -- after the symbol “(“ and before the symbol “)”.

CLAIM 15:

Line 1, delete the word “Withdrawn” after the symbol “(“ and before the symbol “)”.

Line 1, insert the word -- Original -- after the symbol “(“ and before the symbol “)”.

Rejoinder of Claims

2. Claims 1-11 and 16-17 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claims 12-15, directed to the process of making or using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Claims 12-15 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Since all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the restriction requirement made in Paper No. 5 is hereby withdrawn.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: the invention as claimed, namely a laminate comprising a peelable metal top layer, a porous substrate, and a

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bonding layer between the top layer and the substrate, wherein the bonding layer exhibits a tensile strength between 1 and 28 MPa and a percent elongation between 100 and 2000%, and wherein the bonding layer is an aqueous dispersion containing a polymer and microspheres with thermal expansion capability that upon heating, increase in volume and facilitate peeling of the top layer from the substrate, is neither anticipated or fairly suggested by the prior art of record.

The most pertinent prior art of record are the teachings of JP 09-194811 and Darvell et al. (#4,855,170). As detailed in the previous office actions, JP '811 teaches a laminate comprising a peelable metal top layer, a substrate, and a bonding layer, but fails to teach the use of expandable microspheres to facilitate peeling of the metal top layer from the laminate structure. Although Darvell et al. teach the use of expandable microspheres, Darvell et al. explicitly state that "it is interesting to note that expansion of the microspheres appears to decrease the adhesion to automotive enamel but increase the adhesion to stainless steel." Thus, Darvell et al. explicitly teach away from the use of expandable microspheres that expand and facilitate peelability of a metal substrate. Instead, the microspheres as disclosed in Darvell et al. actually increase adhesion to metal substrates upon thermal expansion. Therefore, the adhesive composition as claimed by the Applicant in combination with the expandable microspheres achieves an unexpected result with regards to peelability of the metal top layer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 571-272-1491. The examiner can normally be reached on M-F, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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[Signature]
HAROLD PYON
SUPERVISORY PATENT EXAMINER
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